Claims

[c1]   A method for managing a process control in a dis-
tributed dynamic environment, the method comprising:
including the process schema with the process data of
an individual process instance, providing one or more
Controller components; providing one or more Agent
components.

[c2]   A method according to claim 1 wherein the instance of
the process schema is attached to the data that belongs
to the individual process instance.

[c3]   A method according to claim 2 wherein the process
schema is represented in a format that can be inter-
preted or executed by the Process Controller software
component. The Process Controller uses the instance of
the schema to determine the next activity to be executed
for this process instance.

[c4]   A method according to claim 3 wherein the Process Con-
troller does not require any previously implemented,
coded, scripted, or any other information about the pro-
cess schema beyond the one that comes with the pro-
cess instance.

[c5]   A method according to claim 2 wherein the process schema can be modified by the Agent software component as a part of one or more of the activities in the process.

[c6]   A method according to claim 5 wherein the Agent component provides programming and user interface for modifications of the process schema instance.

[c7]   A method according to claim 6 wherein the process schema may contain restrictions on the modifications.

[c8]   A method according to claim 2 wherein the schema may contain one or more conditions of incompleteness defined as an absence of the next step in the process. When a Controller reaches such a point of incompleteness it forces the user of an activity to eliminate the incompleteness by explicitly defining the next step or steps.

[c9]   A method according to claim 2 wherein the Agent component provides interface between the Controller and the Execution System. The interface includes the ability to convert the process data into a form suitable for a specific Execution System.

[c10] A method according to claim 9 wherein the Agent com-

ponent could be implemented as a plugin into the Execution System.

[c11] A method according to claim 3 wherein a Process Controller component uses the instance of the process schema and the process instance data to determine the next step in the process execution therefore eliminating the need to place the process schema in the scope of the Process Controller in advance and allowing different instances of the process to have different next steps.

[c12] A software system for enabling a user to change the process schema for the given instance of the process without making any changes in the software system implementation or deployment.

[c13] A software system according to claim 12 comprising: one or more Process Controllers and one or more Agents; the system may have pre-existing Master Process Schema for every possible type of process.

[c14] A software system according to claim 13 wherein the Process Controller determines the next step in the process execution and sends the process data and process schema to the Agent.

[c15] A software system according to claim 14 wherein the Agent converts the process data into a form suitable for

the Execution System and provides the programming and user interface for modifying the process schema instance.